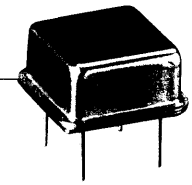
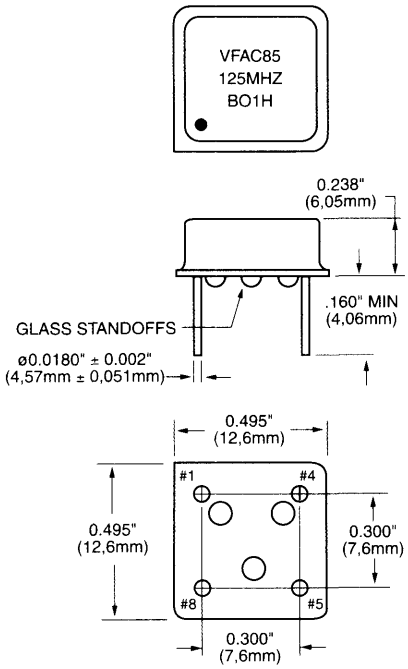
VFAC85



ACMOS/TTL Compatible Half Size DIP Clock Oscillators

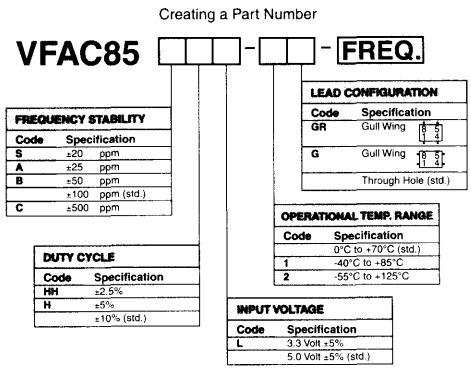
FEATURES

- Wide Frequency Range
- Extended Temperature Ranges
- Tight Symmetry Available
- Common Footprint
- Gull–Wing Package Available



All dimensions are typical unless otherwise specified.

Creating a Part Number



Example: VFAC85SHHL-1GR-50MHz: Frequency Stability ±20ppm, Duty Cycle ±2.5%, Input Voltage 3.3 Volt ±5%, Operating Temperature -40°C to +85°C, Gull Wing, Frequency 50.000MHz.

	Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Max. Ratings	Input Break Down Voltage	Vcc		-0.5		7.0	V	
	Storage Temp.	Ts		–55		+125	°C	
Electrical	Frequency Range	F		2		200	MHz	
	Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration			±100	ppm	1
	Input Voltage	Vcc		4.75 3.15	5.00 3.30	5.25 3.45	V	Std. LV Opt.
	Input Current	Icc	No load, 100MHz			60	mA	2
	Load	10 TTL gates or 50pF MAX, AC coupled 50 Ohm termination recommended						
	Duty Cycle		@1.4V	40	50	60	%	3
	Rise/Fall Time	Tr/Tf	50Ω, 15pf		1	3	ns	20% to 80%
	Logic "1" Level	Voh	Max Load	0.9Vcc				
	Logic "0" Level	Vol	Max Load			0.1Vcc		
	Start–up Time	Ts			2	10	ms	
	Phase Jitter		1σ			1	ps	fj>1KHz
	Tristate Function	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE						
	Enable/ Disable Time	Te/Td				100	ns	
Environmental and Mechanical	Operating Temperature Range	0°C to +70°C (–40°C to +85°C, and –55°C to +125°C available)						
	Mechanical Shock	Per MIL–STD–202, Method 213, Cond. E						
	Thermal Shock	Per MIL–STD–883, Method 1011, Cond. A						
	Vibration	Per MIL–STD–883, Method 2007, Cond. A						
	Soldering Conditions	260°C, for 10s, Max.						
	Hermetic Seal	Leak rate less than 5 x 10^{-8} atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1–Tristate Control Pin #5–Output			Pin #4–Ground, Case Pin #8–Vcc			

Notes:
1. Standard frequency stability, others available.
2. Current is load and frequency dependent.
3. ±5% and ±2.5% duty cycle available.

All specifications are subject to change without notice.

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